

## **WP (F-4) 14**

### **Software – E-mail and Network**

NICOR GAS COMPANY  
BOARD OF DIRECTORS APPROVAL

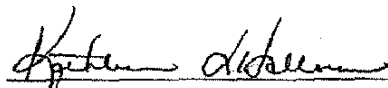
PROJECT REVISION

Budget Item No. 8983 – Novell Replacement

This information technology project replaces the company's Novell system with Windows 2000/Exchange software. This project came in under budget due to less investment in infrastructure than originally anticipated. This project is complete.

Actual Expenditures	\$ 3,769,000
Original Authorization	\$ 4,600,000
Revision	\$ (831,000)

Approved by Financial Policy Committee

  
\_\_\_\_\_  
Secretary

July 11, 2003  
Date

Approved by Board of Directors

  
\_\_\_\_\_  
Secretary

July 17, 2003  
Date

Note: Use additional pages if more space is needed.

BUDGET ITEM NO.	AU NO.	REGION	CAPITAL TYPE (see back)	AFUDC (see back) <input type="checkbox"/> Yes <input type="checkbox"/> No	Estimated Expenditures			
					Year	This Request	Previous Authorization	Total Authorization
8983	452	GO-5 Central	Information Technol	<input type="checkbox"/> Yes <input type="checkbox"/> No	2003	\$ -831000	\$ 4600000	\$ 3769000
Activity # Investment	178331		178332	PARTIAL AUTHORIZATION <input type="checkbox"/> Yes <input type="checkbox"/> No		\$	\$	\$
Activity # Retirement						\$	\$	\$
Activity # Investment	178333					\$	\$	\$
Activity # Retirement						\$	\$	\$
FILE NO.	NBA / MR / PI / S / NO.		ESTIMATED START DATE Year	EST. COMPLETION Year	Retired	\$	\$	\$
			Quarter	Quarter	Total	\$ -831000	\$ 4600000	\$ 3769000

Project Location  
Company wideProject Description  
Novell Replacement Infrastructure Phase II - Migrate off unsupported network operating systems (Novell) & email systems (Groupwise) to Windows 2000 & ExchangeAlternatives Considered  
Upgrade Novell to supported versions & install basic Windows 2000 1 Exchange software to support business needs for Windows 2000Reason for Request  
Support & complianceReason for Budget Revision  
Original approach called for heavy investment in infrastructure architecture to allow the Novell & Windows 2000 environments to remain active simultaneously. Discovered approach would not work given the large number of servers in network. New approach was developed that relied more on labor & less on technology. Lower project costs for hardware (-674); software (-282); increased outside services (+125)

For Revisions Only Revision: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Reimbursable? <input type="checkbox"/> No <input type="checkbox"/> Yes ____%	Income Taxes on Reimbursable Projects <input type="checkbox"/> No (Public interest) <input type="checkbox"/> Yes (Private Party) see instructions	Included in overall budget? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dollars and year(s):
---	--	--	--

Operating Expense Impact (specify in detail)

Economic Assessment Data		Approvals	
Item (see page 2)	value	TAC APPROVAL DATE	ITSC APPROVAL DATE
Cost of Capital (after tax)	%	PRINT RECOMMENDED BY DATE	PRINT APPROVED BY OFFICER DATE
Net Present Value at C/C (after tax)	\$	Cindy Madziarczyk 6/18/03	Barbara Zeller 6/18/03
Internal rate of return (IRR), if applicable	%	RECOMMENDED BY SIGNATURE	APPROVED BY SIGNATURE - OFFICER
		<i>Cindy Madziarczyk</i>	<i>Barbara A. Zeller</i>
Treasurer's Office Approval		APPROVED BY CMT DATE	APPROVED BY BOARD OF DIRECTORS/IFPC DATE
	Date	CMT COMPLETION BY DATE	POST INVESTMENT REVIEW <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Undecided If yes, Quarter _____ Year _____
		ACCOUNTING APPROVAL - CAPITALIZED SOFTWARE	BUDGET COMPLETION/ TOLERANCE CHECK BY DATE

Forward completed form to: Supervisor Plant Accounting ■ GO-5 East

NICOR GAS COMPANY

BOARD OF DIRECTORS  
APPROVAL

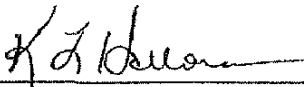
NEW PROJECT

Budeet Item No. 8983 – Information Technology

Replace Novell's Netware operating system with Microsoft's Windows 2000, and replace Groupwise e-mail system with Exchange 2000.


Total Authorization      \$4,600,000

Approved by Financial Policy Committee

  
\_\_\_\_\_  
Secretary

April 12, 2001  
Date

Approved by Board of Directors

  
\_\_\_\_\_  
Secretary

April 19, 2001  
Date

**Note: Use additional pages if more space is needed**

BUDGET ITEM NO.	A/U NO.	REGION	CAPITAL TYPE (see back)	AFUDC (see back)	Estimated Expenditures (\$000)			
				<input type="checkbox"/> Yes <input type="checkbox"/> No	Year	This Request	Previous Authorization	Total Authorization
Activity # Investment	452	GO	520 & 526	<input type="checkbox"/> Yes <input type="checkbox"/> No	2001	\$ 2,000,000.00	\$	\$
Activity # Retirement				<input type="checkbox"/> Yes <input type="checkbox"/> No	2002	\$2,000,000.0		
Activity # Investment					2003	\$600,000.00		\$4,600,000.0
Activity # Retirement								
FILE NO.	NBA/MR/PI/SI NO.	ESTIMATED START DATE		EST. COMPLETION DATE				
		Year 2001		Year 2003				
		Quarter 2		Quarter 2				
						Total	\$4,600,000	

Project Location  
Company Wide

Project Description  
Migrate off unsupported network operating systems (Novell) and e-mail systems (Groupwise) to Windows 2000 and Exchange

Alternatives Considered  
Upgrade Novell to supported versions and install basic Windows 2000 Exchange software to support business needs for Windows 2000

Far Revisions Only  
Revision (circle)  
1 2 3 4

Reason for Request  
Support and compliance

Reimbursable?  
☐ No  
☐ Yes \_\_\_\_\_ %

Reason for Budget Revision

Included in overall budget?  
Dollars and Year(s)

Mains to be Installed				Cost/Foot		Mains to be Retired							
Footage	Size	Type	Class	Est.	Std.	Footage	Size	Yr. Installed	Type	Footage	Size	Yr. Installed	Type
Feet of total main to be installed						Feet of total main to be retired							

Other Facilities (installed or retired). Also include any operating expense impact.

Project OM \$216,000

Economic Assessment Data		Approvals	
Item (see other side)	Value	Print Recommended by	Date
Cost of Capital (after tax)	%	Ron Katt	04/02/01
Net Present Value at C/C (after tax)	\$	Recommended by signature	
Internal rate of return (IRR), if applicable	%	<i>R. Katt</i>	4/2/01
Treasurer's Office Approval (only if FPC to approve)		Print Approved by Vice President	Date
		George Behrens	04/02/01
		Approved by VP signature	
		<i>George Behrens</i>	4/23/2001
		Approved by Board of Directors/FPC	Date
By _____ Date _____		Budget Completion/Tolerance Check by	Date
If you need more space for the 'Mains to be installed/Retired' field, please fill it out on another piece of paper and turn that in with this form.		Post-Investment Review	
		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Undecided	
		If yes, Quarter _____ Year _____	
		Actual Expenditures and commitments through date of completion	CPR Completion by Date

over

REQUIRED BY

Ron Litt

CO. NO.

200

ACCTG. UNIT NO.

452

ACCOUNT NO.

ACTIVITY NO.

DATE

04/02/01

### Fund Request Information

Year	Operating Expense	Capital
2000	\$30,000.00	\$2,000,000.00
2001	\$186,000.00	\$2,000,000.00
2002	\$	\$500,000.00

Item included in annual budget? ☒ Yes ☐ No **PARTIAL**  
**\$1,500,000 (2001)**  
☒ Add ☐ Replacement ☐ N/A

Year 2000 compliant? ☐ Yes ☐ No ☒ N/A

Rate of return: \_\_\_\_\_ IRR or NPV \_\_\_\_\_ at \_\_\_\_\_ % discount

### Description of Request

Nicor has been utilizing Novell's Netware Operating System and Groupwise E-Mail software for the last 10 years. We were informed in September 2000 that the current versions of Netware (3.11) and Groupwise (5.0) will no longer be supported by Novell as of March, 2001. Nicor has requirements today that require Windows 2000 at both the server level and desktop.

This project plans to:  
 Replace Novell with Windows 2000  
 Replace Groupwise with Exchange 2000

**Advantages**  
 Aligned with Network Strategy  
 Allow for integration with eCommerce and Unisys NT initiatives  
 Less technologies to support (lower OE)  
 Market leading software  
 Increased long-term vendor viability  
 Required skill-set easier to obtain

Barbara A. Fenn 4/2/01  
 Project Sponsor (Officer/Manager) Approval Date

### Accounting Department Approval - For capitalized software

Meets accounting guidelines

INC 4/23/01  
 Reviewed by Date

### Technical Architecture Guidance (TAG) Team

Mark Schurz 4-2-01 Mark Schurz 4/2/01  
 Reviewed by Date Approved by Date

### IS Resource Approval

Tom Hoffman 4-2-01 R. Katt 4-2-01  
 Application Approval by Date Operations Approval by Date

### Information Technologies Steering Committee Use Only:

Approved by \_\_\_\_\_ Date \_\_\_\_\_ \$ \_\_\_\_\_  
 Dollar Amount

Comments

Shaded areas for Plant Accounting Use Only

WP (F-4) 14 7/30

ACCOUNTING UNIT NO. <b>452</b>		W.O. / ACTIVITY INVESTMENT NO. <b>178331</b>		W.O. / ACTIVITY RETIREMENT NO. <b>3</b>		W.O. / ACTIVITY REIMBURSABLE NO. <b>4</b>	
CAPITAL TYPE <b>520 Purchased Hardware</b>						BUDGET NO. <b>8983</b>	
DATE PREPARED <b>04/27/2001</b>		PREPARED BY <b>M.B. Abrams</b>		PROJECT LOCATION <b>GO - Company Wide</b>			
AUTHORIZED BY <b>Ron Katt / Barbara Zeller</b>				DATE <b>04/20/01</b>			
ADDITIONS			RETIRES				Est. Original Cost
ITEM	SIZE	QUANTITY	ITEM	YR. INSTALLED	SIZE	QUANTITY	
1 MS Windows	2000						
2 Exchange	2000						
3							
4							
Cost Estimate - Additions		Cost Estimate - Retires			Reimbursable		
TOTAL <b>1,262,000.00</b>		REMOVAL COST \$	SALVAGE VALUE \$	TOTAL \$	PERCENT REIMBURSABLE %	TOTAL \$	

Description, Location, Additional Items (attach sketch, if needed)

Placement of the Novell Network system with Microsoft Windows 2000 and the Groupwise e-mail system with Exchange 2000. Project timeline will be: Start - 2nd Qtr, 2001 and Completion 2nd Qtr, 2003  
Total of Cost of Project is Capital \$4,566,000 and OOM \$216,000

Cap Type 520 Purchased Hardware \$1,262,000 178331  
Cap Type 525 Customize/Internally Developed Software \$2,793,000 178332  
Cap Type 526 Purchased Software \$511,000 178333

Completion Dates

Service \_\_\_\_\_ Out of Service \_\_\_\_\_

Distribution: Original to Plant Accounting. Copy to Plant Accounting on job completion.

Shaded areas for Plant Accounting Use Only

ACCOUNTING UNIT NO. <b>452</b>		W.O. / ACTIVITY INVESTMENT NO. <b>1 78332</b>		W.O. / ACTIVITY RETIREMENT NO. <b>3</b>		W.O. / ACTIVITY REIMBURSABLE NO. <b>4</b>	
CAPITAL TYPE <b>52.5 Custm/Internal Sftwr</b>						BUDGET NO. <b>8983</b>	
DATE PREPARED <b>04/27/2001</b>		PREPARED BY <b>M.B. Abrams</b>		PROJECT LOCATION <b>GO - Company Wide</b>			
AUTHORIZED BY <b>Ron Katt / Barbara Zeller</b>				DATE <b>04/20/01</b>			
ADDITIONS			RETIRES				Estimated Total Cost
ITEM	SIZE	QUANTITY	ITEM	YR. INSTALLED	SIZE	QUANTITY	
1 MS Windows	2000						
2 Exchange	2000						
3							
4							
Cost Estimate - Additions			Cost Estimate - Retires			Reimbursable	
TOTAL			REMOVAL COST	SALVAGE VALUE	TOTAL	PERCENT REIMBURSABLE	TOTAL
\$ 2,793,000.00			\$	\$	\$	%	\$

Description, Location, Additional Items (attach sketch, if needed)

Replacement of the Novell Netware system with Microsoft Windows 2000 and the Groupwise e-mail system with Exchange 2000. Project timeline will be: Start - 2nd Qtr, 2001 and Completion 2nd Qtr, 2003  
Total of Cost of Project is Capital \$4,566,000 and OOM \$216,000

Cap Type 520 Purchased Hardware \$1,262,000  
Cap Type 525 Customize/Internally Developed Software \$2,793,000  
Cap Type 526 Purchased Software \$511,000

Completion Dates

In Service \_\_\_\_\_ Out of Service \_\_\_\_\_

Distribution: Original to Plant Accounting. Copy to Plant Accounting on job completion.



Shaded areas for Plant Accounting Use Only

ACCOUNTING UNIT NO. <b>452</b>		W.O. / ACTIVITY INVESTMENT NO. <b>178333</b>		W.O. / ACTIVITY RETIREMENT NO. <b>3</b>		W.O. / ACTIVITY REIMBURSABLE NO. <b>4</b>	
CAPITAL TYPE <b>526 Purchased Software</b>						BUDGET NO. <b>8983</b>	
DATE PREPARED <b>04/27/2001</b>		PREPARED BY <b>M.B. Abrams</b>		PROJECT LOCATION <b>GO - Company Wide</b>			
AUTHORIZED BY <b>Ron Katt / Barbara Zeller</b>				DATE <b>04/20/01</b>			
ADDITIONS			RETIREES				Original Cost
ITEM	SIZE	QUANTITY	ITEM	YR. INSTALLED	SIZE	QUANTITY	
1 MS Windows	2000						
2 Exchange	2000						
3							
4							
Cost Estimate - Additions		Cost Estimate - Retires			Reimbursable		
TOTAL		REMOVAL COST	SALVAGE VALUE	TOTAL	PERCENT REIMBURSABLE	TOTAL	
\$ 511,000.00		\$	\$	\$	%	\$	

Description. Location, Additional Items (attach sketch. if needed)

Placement of the Novell Netware system with Microsoft Windows 2000 and the Groupwise e-mail system with Exchange 2000. Project timeline will be: Start = 2nd Qtr, 2001 and Completion 2nd Qtr, 2003  
 Total of Cost of Project is Capital \$4,566,000 and OOM \$216,000

Cap Type 520 Purchased Hardware \$1,262,000  
 Cap Type 525 Customize/Internally Developed Software \$2,793,000  
 Cap Type 526 Purchased Software \$511,000

## Completion Dates

Service \_\_\_\_\_ Out of Service \_\_\_\_\_

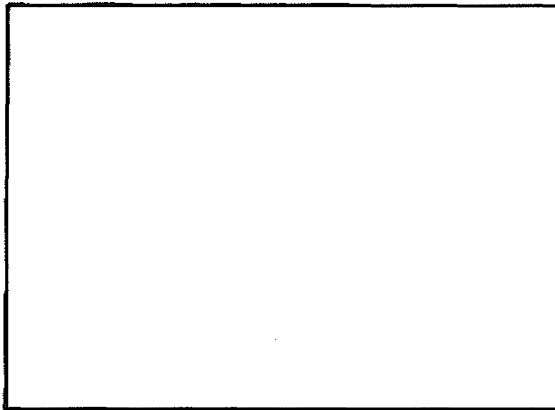
Distribution: Original to Plant Accounting. Copy to Plant Accounting on job completion.



W2K

	Capital				OE			
	Purchase SW	Customize SW	Install HW	Sub-total	Purchase SW	Customize SW	Install HW	Sub-total
Win2K AD Infrastructure	212	241	199	652				0
Exchange 2000 Server	125	390	381	896				0
Outlook 2000 Client		615	20	635		72		72
File & Print Servers	107	169	497	773				0
Workstation Application Certification		349		349				0
Project Management		559		559				0
IT Training				0		124		124
Operational Readiness		85		85				0
Project Communications		21		21		20		20
Sub-total	444	2,429	1,097	3,970	0	216	0	216
Taxes				-				0
Contingency	67	364	165	596				0
Total	511	2,793	1,261	4,566	0	216	0	216

**April** 2001 Board Meeting



***Novell Operating System and  
Groupwise E-Mail Replacement***

***Nicor Gas Network Environment***

- Novell platform is 10 years old
- Supports 80 file servers
- Enables 1800+ workstations
- One million e-mails per week

***Strategic Direction***

- Groupwise functional deficiencies
- Novell market decline
- Microsoft strategy
  - Desktop
  - Web application development

***Tactical Issues***

- Unsupported Novell/Groupwise risk
- Replacement is complex and labor intense
- Business solutions requiring Windows 2000 are growing

***Approach***

- Avanade/Accenture as integrators
- 24-month timeframe
- Impacts all business users



# **Novell Operating System and Groupwise E-Mail Replacement**

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**Presentation to Financial Policy Committee**

*April 12, 2001*

## Current Issues

- Nicor has been utilizing Novell's Netware Operating System (O.S.) and Groupwise E-Mail software for the last 10 years. The versions of Netware (4.1) and Groupwise (5.2) that Nicor is running are no longer supported by Novell as of March, 2001.
- Novell's share of the O.S. market (16.8%) began to decline in 2000 and adoption of their new products has been slow. Groupwise market share (11.4%) has also been declining since 1999. Adoption of the Windows 2000 products has been growing strongly. Microsoft Exchange e-mail system has the second largest market (35.4%) share behind Lotus Notes (42.3%).
- Nicor has a growing number of business solutions that require Windows 2000 at both the server level and desktop. Our recent decision for the e:municipal portal will be built on a Microsoft platform. With a minimal amount of e-business, our internet mail averages over 2,000 messages daily.
- Future integration with applications and e-business will require compatibility with Exchange (e-mail). Not using Microsoft could cause compatibility issues similar to those Nicor had in 1997 with WordPerfect and Lotus.
- Nicor's 1997-1998 PC replacement and standardization program (\$3.3M) addressed only the desktop hardware and software. With the pace of this technology changing, Nicor is three generations behind current desktop hardware, operating systems and application office suite versions.
- Nicor has partnered with Accenture/Avanade in Q1 to conduct a study of the alternatives and to develop an approach that has lead up to this recommendation.

## Alternative 1 – Total Cost: \$4.8 M – Recommended

- ☐ Capital \$4.6
- ☒ Operating Expense \$0.2
  
- ☐ Replace Novell with Windows 2000
- ☒ Replace Groupwise with Exchange 2000

### Advantages

- ☒ Aligned with Network Strategy
- ☒ Allows for integration with eCommerce and Unisys NT initiatives
- ☒ Less technologies to support (lower OE)
- ☒ Market leading software
- ☒ Increased long-term vendor viability
- ☒ Required skill-set easier to obtain

### Disadvantages

- ☒ Higher cost
- ☐ New user interface (training)
- ☒ Increased IT learning curve

*Based on 24 month over three budget years timeframe to complete.*

**NICOR GAS COMPANY**  
**BOARD OF DIRECTORS**  
**APPROVAL**

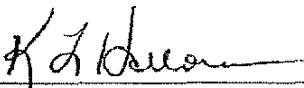
**NEW PROJECT**

**Budget Item No. 8983 – Information Technology**

Replace Novell's Netware operating system with Microsoft's Windows 2000, and replace Groupwise e-mail system with Exchange 2000.


Total Authorization      \$4,600,000

**Approved by Financial Policy Committee**

  
\_\_\_\_\_  
Secretary

April 12, 2001  
Date

**Approved by Board of Directors**

  
\_\_\_\_\_  
Secretary

April 19, 2001  
Date



				Organizati	RNI	Quant	Item
01/11/2000	91534	ADMINISTRATION VP Administration 64050 G&A Dup 254827 AMERICAN LITHO INC	703698 - 1			425.6	
			Purchase Order			425.6	
02/08/2001	60940	ADMINISTRATION VP Administration 56050 G&A Mai 240919 ILLINOIS MATERIAL HAN	707095 - 1			3551.5	
			Purchase Order			3551.5	
12/08/2000		91365 Remittance Proces 64050 G&A Dup 211393 F C L GRAPHICS INC	707406 - 1			1790	
			Purchase Order			1790	
12/21/2000		10375 Ofc Gen Mgr Acct 15790 CWIP Fu 210042 GORDON FLESCH CO IN	707520 - 3			260	
			Purchase Order			260	
01/18/2001		CUSTOMERCARE Customer Care 64040 G&A Co 210042 GORDON FLESCH CO IN	707662 - 3			95	
			707662 - 1			2695	
			Purchase Order			2790	
09/18/2000		CCISP Cust Care Info Syst Proj 15830 CWIP Ot 251659 BFC PRINT	706426 - 1			57.4	
			Purchase Order			57.4	



## Alternative 2 – Total Cost: \$3.5 M

- Capital \$3.3
- Operating Expense \$0.2

- Upgrade to supported version of Novell
- Upgrade to supported version of Groupwise
- ☐ Create "basic" Windows 2000 environment
- Create "basic" Exchange environment

### Advantages

- ☐ Least cost
- Decreased user training
- Decreased business disruption

### Disadvantages

- Still requires basic W2K and Exchange
- Significant cost to upgrade Novell and prepare for Windows 2000 / Exchange coexistence
  - Increased cost for maintenance (OE)
- ☐ Multiple implementations
- Future of Novell and Groupwise unknown
  - Additional future cost for complete conversion

## **Benefits of Windows 2000 Architecture include:**

- Windows 2000 Network Operating System on Servers
- Active Directory and File/Print services on Servers
- MS Exchange 2000 e-mail servers (runs on Windows 2000)
- MS Outlook -mail client on workstations (runs on Windows 2000)
- Windows 2000 Operating System and applications on workstations

Active Directory is Microsoft's trademarked directory service, an integral part of the Windows 2000 NOS architecture. Active Directory is a centralized and standardized database that automates network management of user data, security, and distributed resources.

## **Recommended - Windows 2000/Exchange/Outlook Project Action Plan and Scope**

### ■ May 2001 to July 2001

- Refine deployment timelines
- Create detailed Windows 2000/Exchange 2000 Infrastructure Architecture
- Begin build of Windows 2000/Exchange 2000 Infrastructure
- Inventory Business Unit workstation applications
- Begin Testing and Certification of Business Unit workstation applications
- Begin training of IT support staff on Windows 2000/Exchange 2000

### ■ July 2001 to December 2001

- Test and begin deployment of Windows 2000/Exchange 2000 Infrastructure
- Design, Build, Test Outlook 2000 client (e-mail)
- Rollout e-mail client pilot (includes training of pilot users)
- Complete Workstation application certification

### ■ January 2002 to May 2003

- Complete build and deployment of Windows 2000/Exchange 2000 Infrastructure
- Deploy Outlook 2000 to the User community
- Design, Build, test Windows 2000 File and Print Architecture
- Deploy Windows 2000 File and Print Infrastructure

## Project Timeline

## Alternative 2 - Preliminary Program Timeline

Estimated Cost Per Year with 15% Contingency		\$2.0 M			\$2.0 M				\$.6 M		
	Estimated Days	2001			2002				2003		
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>Windows 2000 AD/Exchange 2000 Servers</b>	<b>630</b>										
Design Infrastructure		■									
Build Infrastructure			■		■						
Test Infrastructure				■							
Deploy Infrastructure				■	■						
<b>Outlook 2000 Client (e-mail)</b>	<b>252</b>										
Design, Build, Test							■				
Early Adopters Pilot							■				
Train Users/Deploy Outlook 2000						■	■				
<b>Windows 2000 File and Print Servers</b>	<b>272</b>										
Design, Build, Test									■	■	
Deploy Win2K File & Print Servers									■	■	
<b>Workstation Application Certification</b>	<b>194</b>										
Inventory Applications		■									
Test/Certify Applications			■	■							
<b>Project Communications and IT Training</b>	<b>217</b>				■	■	■	■	■	■	■
<b>Operational Readiness</b>	<b>101</b>					■	■	■	■	■	■
<b>Program Management</b>	<b>338</b>				■	■	■	■	■	■	■
<b>Contingency</b>	<b>301</b>										
Total		2,305	Total Estimated Cost = \$4.6M								

Ability to synchronize data between Novell GroupWise and Windows 2000/Exchange 2000.

**Item 2b.**

**NICOR INC.**

**FINANCIAL POLICY COMMITTEE  
BOARD OF DIRECTORS  
APPROVAL**

**NEW PROJECT**

**Budget Item No. 8983 – Information Technology**

Replace Novell's Netware operating system with Microsoft's Windows 2000, and replace Groupwise e-mail system with Exchange 2000.

Total Authorization      **\$4,600,000**



# **Novell Operating System and Groupwise E-Mail**

**F e**

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**Presentation to Financial Policy Committee**

*April 12, 2001*

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### **Advantages**

- Aligned with Network Strategy
  - Allows for integration with eCommerce and Unisys NT initiatives
- Less technologies to support (lower OE)
- Market leading software
- Increased long-term vendor viability
- Required skill-set easier to obtain

### **Disadvantages**

- Higher cost
- New user interface (training)
- Increased IT learning curve

*Based on 24 month over three budget years timeframe to complete.*



Windows 2000 /Exchange Project Costs - Capital and OE

Windows 2000 Project								
Capital					OE	Days		
(\$ Thousands)					(Accounted in 2001 Budget)	IS	Vendor	Total
	Nicor IS	Vendor Fees	Hardware & Software	Sub-Total				
Win2K AD Infrastructure	38	263	351	652		108	132	240
Exchange 2000 Server	47	510	339	896		135	255	390
Outlook 2000 Client	53	562	20	635	72	151	461	612
File & Print Servers	64	178	531	773		183	89	272
Workstation Application Certification	120	229		349			137	137
Project Management	25	534		559			267	267
IT Training		0		0	124		124	124
Operational Readiness	25	60		85		71	30	101
Project Communications	11	10		21	20	60	10	70
<b>Sub-Total</b>	<b>383</b>	<b>2,346</b>	<b>1,241</b>	<b>3,970</b>	<b>216</b>	<b>708</b>	<b>1,505</b>	<b>2,213</b>
Taxes/Shipping								
Contingency (15%)				596		106	226	332
<b>Total Cost (Capital, OE)</b>				<b>4,566</b>	<b>216</b>	<b>814</b>	<b>1,731</b>	<b>2,545</b>

Budget	2001	2002	2003	Total
(\$Millions)	2.2	2.0	0.6	4.8

## Alternative 2 – Total Cost: \$3.5 M

- Capital \$3.3
- Operating Expense \$0.2
- Upgrade to supported version of Novell
- Upgrade to supported version of Groupwise
- Create "basic" Windows 2000 environment
- Create "basic" Exchange environment

### Advantages

- Least cost
- Decreased user training
- Decreased business disruption

### Disadvantages

- Still requires basic W2K and Exchange
- Significant cost to upgrade Novell and prepare for Windows 2000 / Exchange coexistence
- Increased cost for maintenance (OE)
- Multiple implementations
- Future of Novell and Groupwise unknown
- Additional future cost for complete conversion

## **Benefits of Windows 2000 Architecture include:**

Windows 2000 Network Operating System on Servers

- Active Directory and File/Print services on Servers

MS Exchange 2000 e-mail servers (runs on Windows 2000)

- MS Outlook -mail client on workstations (runs on Windows 2000)
- Windows 2000 Operating System and applications on workstations

Active Directory is Microsoft's trademarked directory service, an integral part of the Windows 2000 NOS architecture. Active Directory is a centralized and standardized database that automates network management of user data, security, and distributed resources.

## **Recommended - Windows 2000/Exchange/Outlook Project Action Plan and Scope**

### **■ May 2001 to July 2001**

- Refine deployment timelines
- Create detailed Windows 2000/Exchange 2000 Infrastructure Architecture
- Begin build of Windows 2000/Exchange 2000 Infrastructure
- Inventory Business Unit workstation applications
- Begin Testing and Certification of Business Unit workstation applications
- Begin training of IT support staff on Windows 2000/Exchange 2000

### **■ July 2001 to December 2001**

- Test and begin deployment of Windows 2000/Exchange 2000 Infrastructure  
Design, Build, Test Outlook 2000 client (e-mail)
- Rollout e-mail client pilot (includes training of pilot users)  
Complete Workstation application certification

### **■ January 2002 to May 2003**

- Complete build and deployment of Windows 2000/Exchange 2000 Infrastructure
- Deploy Outlook 2000 to the User community
- Design, Build, test Windows 2000 File and Print Architecture  
Deploy Windows 2000 File and Print Infrastructure

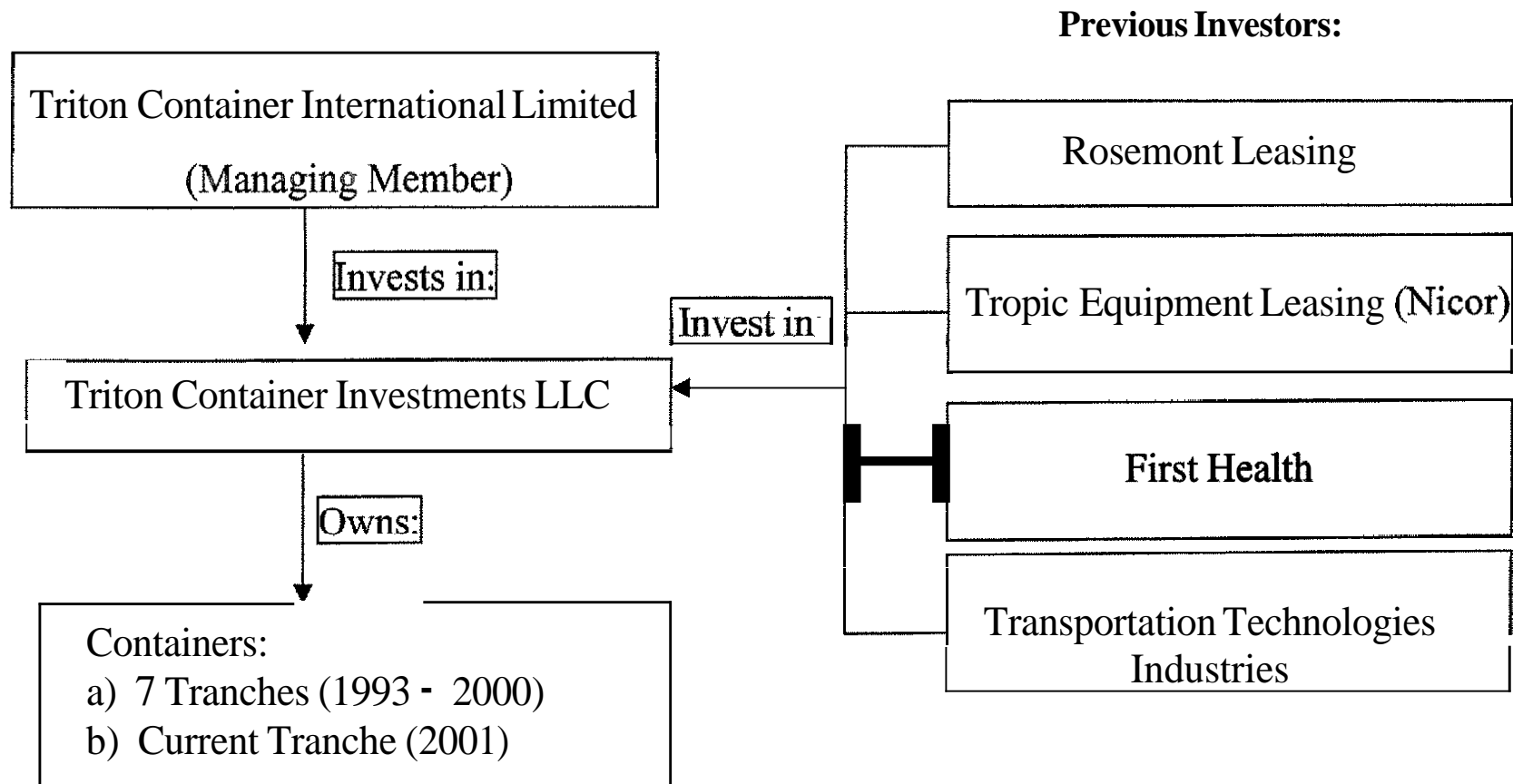
## Alternative 2 - Preliminary Program Timeline

Estimated Cost Per Year with 15% Contingency		\$2.0 M			\$2.0 M				\$0.6 M		
	Estimated Days	2001			2002				2003		
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>Windows 2000 AD/Exchange 2000 Servers</b>	<b>630</b>										
Design Infrastructure		■									
Build Infrastructure			■		■						
Test Infrastructure			■								
Deploy Infrastructure				■	■						
<b>Outlook 2000 Client (e-mail)</b>	<b>252</b>										
Design, Build, Test							■				
Early Adopters Pilot							■				
Train Users/Deploy Outlook 2000						■	■				
<b>Windows 2000 File and Print Servers</b>	<b>272</b>										
Design, Build, Test									■	■	
Deploy Win2K File & Print Servers									■	■	
<b>Workstation Application Certification</b>	<b>194</b>										
Inventory Applications		■									
Test/Certify Applications			■	■							
<b>Project Communications and IT Training</b>	<b>217</b>				■	■	■	■	■	■	
<b>Operational Readiness</b>	<b>101</b>					■	■	■	■	■	
<b>Program Management</b>	<b>338</b>				■	■	■	■	■	■	
<b>Contingency</b>	<b>301</b>										
<b>Total</b>	<b>2,305</b>	<b>Total Estimated Cost = \$4.6M</b>									

Ability to synchronize data between Novell GroupWise and Windows 2000/Exchange 2000.

Exhibit 1

## Ownership Structure of Triton Container Investments LLC



**WP (F-4) 15**

**Gas Distribution Improvement – Main  
Replacement**

Nicor Gas  
1844 Ferry Road  
Naperville, IL 60563-9600

Mailing Address:  
P.O. Box 190  
Aurora, IL 605074190

Phone 630 983-8676  
internet [www.nicorgas.com](http://www.nicorgas.com)

Minutes of Special Meeting of the Board  
of Directors of Nicor Gas Company held pursuant  
to notice at the Company's General Office,  
1844 Ferry Road, Naperville, Illinois,  
on Thursday, July 18, 2002 at 9:00 a.m.

PRESENT: Robert M. Beavers, Jr.  
Bruce P. Bickner  
John H. Birdsall, III  
Thomas A. Donahoe  
Thomas L. Fisher  
John E. Jones  
Dennis J. Keller  
William A. Osborn  
John Rau  
John F. Riordan  
Patricia A. Wier

being all of the members of the Board of Directors.

Mr. Cali presented two capital project revision requests. The first project's original request to replace main was for \$2,240,000. The increased expenditures of \$555,000 reflect adjacent public improvement work that increased the amount of facilities requiring replacement. The total project cost is \$2,795,000. The original request for the other project was \$917,000 to relocate main on public right-of-way due to road construction. The cost revision of \$124,000 results from increased welding, tie-ins and backfill related to more extensive requirements. The total project cost is \$1,041,000. Upon motion duly made and seconded, the revisions were approved.

**NICOR GAS COMPANY  
BOARD OF DIRECTORS APPROVAL  
PROJECT REVISION**

**Budget Item No. 2263 – Main Revlacement**

Material and labor to replace about 37,000 feet of mostly 8 inch steel main installed in the 1920's and operating at 60 psig. The cost revision reflects adjacent public improvement work that increased the amount of facilities requiring replacement.

Current Request	\$ 555,000
Previous Request	<u>2,240,000</u>
Total Authorization	<u>\$2,795,000</u>



200 Nicor Gas  
PLANT BUDGET AUTHORIZATION REQUEST 4009 2-99

#2263

Use additional pages if more space is needed

WP (F-4) 15 3/9

3/2/00

Page 1 of 2

EM NO.	AU NO.	REGION	CAPITAL TYPE (see back)	AFUDC (see back)	Estimated Expenditures (\$000)			
					Year	This Request	Previous Authorization	Total Authorization
63	696	South	Main Replace	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2000	\$ 750.00	\$ 600.0	\$ 750.00 / 350.0
Activity # Investment	148633		148634	PARTIAL AUTHORIZATION	2001	\$800.00		\$800.00
Activity # Retirement	348633		348634	<input type="checkbox"/> Yes <input type="checkbox"/> No				
Activity # Investment	148635		148463 - \$5 here					
Activity # Retirement	348635		348463					
FILE NO.	NBA / MR / PI / SI NO.	ESTIMATED START DATE	EST. COMPLETION DATE					
E16302A-K	MR9901	Year 2000 Quarter 3	Year 2001 Quarter 3	Retired		\$70.00	20.0	\$70.00 90
				Total		\$1,620.00	620.0	\$1,620.00

Project Location

East Hazelcrest, Homewood, Chicago Heights, Cook County

2,240  
2,795,000

Project Description

Install 27,200'-8", 6000'-2" PE, 550'-4" PE, 200'-4" and 200'-6" from 171st and Ashland to Joe Orr Road and State Street along Ashland, Riegel, and Joe Orr Road. Install 1-dual 5x5 vault at 171st and Ashland.

SIO LINE

Alternatives Considered

Install 12" 60 psig main instead of 8" high-pressure main. Reviewed alternate routes for the installation which involved additional footages. Continue to repair existing 10" gas main.

For Revisions Only

Revision (circle)

2 3 4

Reason for Request

Economic analysis indicates it is more feasible to replace rather than repair (MR9901).

Reimbursable?

☒ No  
☐ Yes %

Reason for Budget Revision

This revision includes Phases II and III to complete the overall replacement project. Please note: the economic assessment that was completed on the original Plant Budget Authorization Request (see attached) was done for the overall project including Phases I, II and III.

included in overall budget? Yes

Dollars and Year(s)  
\$800/2000

Mains to be Installed				Cost/Foot		Mains to be Retired							
Footage	Size	Type	Class	Est.	Std.	Footage	Size	Yr. Installed	Type	Footage	Size	Yr. Installed	Type
27,200	8"	STL	II	\$52.87	\$60.50	6,110	10"	UNK	STL	1,850	2"	UNK	SC
6,000	2"	PE	II	\$15.00	\$16.89	13,260	10"	1926	STL	60	4"	1961	STL
550	4"	PE	II	\$23.64	\$24.84	2,400	10"	1943	STL	20	4"	1962	STL
200	4"	STL	II	\$36.00	\$30.81	370	10"	1957	STL	20	4"	1973	STL
200	6"	STL	II	\$32.50	\$31.57	170	10"	1961	STL				
						710	10"	1982	STL				
Feet of total main to be installed 34,150.00						Feet of total main to be retired 24,970.00							

Other Facilities (installed or retired). Also include any operating expense impact.

Install 1-dual 5x5 steel vault, 4-8" valves, 2-6" valves

Economic Assessment Data		Approvals	
Item (see other side)	Value	Print Recommended by	Date
Cost of Capital (after tax)	%	Recommended by signature	
Net Present Value at C/C (after tax)	\$	Approved by signature	
Internal rate of return (IRR), if applicable	%	Approved by CPR	Date
Treasurer's Office Approval (only if FPC to approve)		Approved by Board of Directors/FPC	Date
B. _____	Date	Budget Completion/ Tolerance Check by	Date
		Post-Investment Review	
		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Undecided	
		If yes, Quarter _____ Year _____	
		Actual Expenditures and commitments through date of completion	CPR Completion by Date

If you need more space for the "Mains to be installed/Retired field", please fill it out on another piece of paper and turn that in with this form.

over

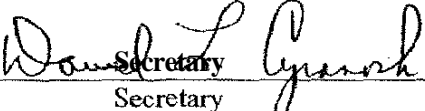
## MCOR GAS

BOARD OF ~~DIRECTORS~~ APPROVALNEW PROJECTBudget Item No. 2263 – Main Replacement

Material and labor to ~~replace~~ about 37,000 feet of mostly 10 inch steel main installed in the 1920's and operating at 60 psig. Replacement is ~~required~~ for ~~three~~ reasons: 1) the deteriorating condition ~~of~~ this bare ~~steel~~ pipeline installed with mechanical couplings; 2) because of its condition and mechanical joints, repairs typically involve custom ~~fittings~~ which are costly and problematic in emergencies; and 3) the new line will be 8 inches in diameter ~~but~~ will operate at higher pressures (230 psig) and provide a ~~backfeed~~ to the other higher pressure systems in the area.

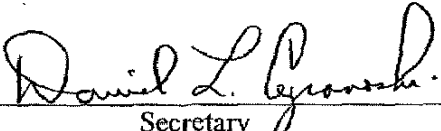
Total Authorization                      \$2,240,000

Approved by Financial Policy Committee

  
Secretary  
Secretary

March 7, 2000

Approved by Board of Directors

  
Secretary  
Secretary

March 16, 2000

200 Nicor Gas  
PLANT BUDGET AUTHORIZATION REQUEST 4009 2-99

Revised

WP (F-4) 15 5/9

Page 1 of 2

No Use additional pages if more space is needed

FILE NO.	A/U NO.	REGION	CAPITAL TYPE (see back)	AFUDC (see back)	Estimated Expenditures (\$000)			
2263	696	South	Main Replace	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Year	This Request	Previous Authorization	Total Authorization
Activity # Investment	148633		148634	PARTIAL AUTHORIZATION	2000	\$ 750.00	\$	\$ 750.00
Activity # Retirement	348633		348634	<input type="checkbox"/> Yes <input type="checkbox"/> No	2001	\$800.00		\$800.00
Activity # Investment	148635							
Activity # Retirement	348635							
FILE NO.	NBA/MR / P1/S1 NO.	ESTIMATED START DATE		EST. COMPLETION DATE				
E16302A-K	MR9901	Year 2000		Year 2001				
		Quarter 3		Quarter 3				
				Retired		\$70.00		\$70.00
				Total		\$1,620.00	620.0	\$1,620.00

Project Location  
East Hazelcrest, Homewood, Chicago Heights, Cook County

2,240.0

## Project Description

Install 27,200'-8", 6000'-2" PE, 550'-4" PE, 200'-4" and 200'-6" from 171st and Ashtand to Joe Orr Road and State Street along Ashland, Riegel, and Joe Orr Road. Install I-dual 5x5 vault at 171st and Ashland.

## Alternatives Considered

Install 12" 60 psig main instead of 8" high-pressure main. Reviewed alternate routes for the installation which involved additional footages. Continue to repair existing 10" gas main.

## For Revisions Only

Revision (circle)

☒ 2 ☐ 3 ☐ 4

## Reason for Request

Economic analysis indicates it is more feasible to replace rather than repair (MR9901).

## Reimbursable?

☒ No ☐ Yes \_\_\_\_\_ %

## Reason for Budget Revision

This revision includes Phases II and III to complete the overall replacement project. Please note: the economic assessment that was completed on the original Plant Budget Authorization Request (see attached) was done for the overall project including Phases I, II and III.

Included in overall budget? Yes

Dollars and Year(s)  
\$800/2000

Mains to be Installed				Cost/Foot		Mains to be Retired							
Footage	Size	Type	Class	Est.	Std.	Footage	Size	Yr. Installed	Type	Footage	Size	Yr. Installed	Type
27,200	8"	STL	II	\$52.87	\$60.50	6,110	10"	UNK	STL	1,850	2"	UNK	SC
6,000	2"	PE	II	\$15.00	\$16.89	13,260	10"	1926	STL	60	4"	1961	STL
550	4"	PE	II	\$23.64	\$24.84	2,400	10"	1943	STL	20	4"	1962	STL
200	4"	STL	II	\$36.00	\$30.81	370	10"	1957	STL	20	4"	1973	STL
200	6"	STL	II	\$32.50	\$31.57	170	10"	1961	STL				
						710	10"	1982	STL				
Feet of total main to be installed 34,150.00						Feet of total main to be retired 24,970.00							

Other Facilities (Installed or retired). Also include any operating expense impact.

Install 1-dual 5x5 steel vault, 4-8" valves, 2-6" valves

Economic Assessment Data		Approvals	
Item (see other side)	Value	Print Recommended by	Print Approved by Vice President
Cost of Capital (after tax)	%	ANGELA WHITEFIELD	Lonnie Upshaw
Net Present Value at C/C (after tax)	\$	Recommended by signature	Approved by VP signature
Internal rate of return (IRR), if applicable	%	ANGELA WHITEFIELD	Lonnie Upshaw
Treasurer's Office Approval (only if FPC to approve)		Approved by CPR	Approved by Board of Directors/FPC
By: D _____ a _____ t _____ e _____		Budget Completion/ Tolerance Check by	Post-Investment Review
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Undecided
			If yes, Quarter _____ Year _____
If you need more space for the 'Mains to be Installed/Retired' field, please fill it out on another piece of paper and turn that in with this form.		Actual Expenditures and commitments through date of completion	CPR Completion by
			Date

over

NORTHERN ILLINOIS GAS

## BUDGET AUTHORIZATION REQUEST 86-4009 4-84

NOTE: USE ADDITIONAL PAGES IF MORE SPACE IS NEEDED

PAGE 2 OF 2

BUDGET ITEM NO.	DEPT NO.	DIVISION	ACTIVITY TYPE (SEE BACK)	APUDC (SEE BACK)	ESTIMATED EXPENDITURES (\$000)			
2263	696	SOUTHERN	MAIN REPLACEMENT	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	YEAR	THIS REQUEST	PREVIOUS AUTHORIZATION	TOTAL AUTHORIZATION
W.D. # INVESTMENT	148463			PARTIAL AUTHOR.	1999	\$600.00		\$600.00
W.D. # RETIREMENT	348463			<input type="checkbox"/> YES <input type="checkbox"/> NO				
FILE NO.	NBA / MR / PI / SI NO.	EST. START DATE	EST. COMPLETION DATE					
E16302A-K	MR9901	11 01 99	YEAR 4/1/00 QUARTER 1		RETIRE	\$20.00		\$20.00
					TOTAL	\$620.00		\$620.00

## PROJECT LOCATION

HAZEL CREST AND EAST HAZEL CREST. THORNTON TOWNSHIP. COOK COUNTY.

## PROJECT DESCRIPTION

INSTALL 6,705'-8", 10" - 6", 10'-4" AND 3,665'- 2" P.E. GAS MAIN ALONG LINCOLN, BETWEEN 167TH ST. AND 171ST., AND ALONG 171ST STREET BETWEEN LINCOLN AND ASHLAND. INSTALL 1 - 5'X5' DUAL VAULT ALONG LINCOLN AT 170TH ST.

## ALTERNATIVES CONSIDERED

INSTALL 10" 60 PSIG MAIN INSTEAD OF 8" HIGH PRESSURE MAIN.  
REVIEWED ALTERNATE ROUTES FOR THE INSTALLATION WHICH INVOLVED ADDITIONAL FOOTAGES.  
CONTINUE TO REPAIR EXISTING 10" GAS MAIN.

## REASON FOR REQUEST

ECONOMIC ANALYSIS INDICATES IT IS MORE ECONOMICAL TO REPLACE RATHER THAN REPAIR.  
(MR9901)

## FOR REVISIONS ONLY

## REVISION NUMBER

☐ 1 ☐ 2 ☐ 3

## REIMBURSABLE

☒ NO  
☐ YES \_\_\_\_\_ %

## INCLUDED IN BUDGET

## DOLLARS AND YEAR(S)

\$600.00 (1999)

MAINS TO BE INSTALLED						MAINS TO BE RETIRED							
FOOTAGE	SIZE	TYPE	CLASS	COST / FOOT		FOOTAGE	SIZE	YEAR INSTALLED	TYPE	FOOTAGE	SIZE	YEAR INSTALLED	TYPE
				EST.	STD.								
3,665	2"	P.E.	II	\$43.31	\$16.89	15	2"	1900	STL	635	2"	1959	STL
10	4"	STL	II	\$187.43	\$30.31	1,925	10"	1926	STL	30	6	1960	STL
10	6"	STL	II	\$197.43	\$31.57	4,095	10"	1929	STL	115	8	1960	STL
6,705	8"	STL	II	\$56.44	\$60.50	165	4"	1956	STL	565	16	1960	STL
						125	4"	1958	STL	440	2	1984	STL
						120	8"	1958	STL	75	2	1996	P.E.
FEET OF TOTAL MAIN TO BE INSTALLED						FEET OF TOTAL MAIN TO BE RETIRED							
10,390						8,305							

OTHER FACILITIES (INSTALLED OR RETIRED).  
ALSO INCLUDE ANY OPERATING EXPENSE IMPACT

RETIRE 1-5X5 VAULT UNIT #1017, 1-5X5 VAULT UNIT #1119. INSTALL 1 6X5 #410119, 5-8" & 1-6" STL VALVE. 88 SERVICES  
AT \$400.00 = \$35,200.00

ECONOMIC ASSESSMENT DATA		MAINS TO BE RETIRED	
ITEM	VALUE	RECOMMENDED BY	DATE
COST OF CAPITAL (AFTER TAX)	10%	APPROVED BY PICC	DATE
NET PRESENT VALUE (AFTER TAX)	(\$2.3)	BUDGET COMPLETION / TOLERANCE CHECK BY	DATE
INTERNAL RATE OF RETURN (IRR)	NM	ACTUAL EXPENDITURES AND COMMITMENTS THROUGH DATE OF COMPLETION	DATE
TREASURER'S OFFICE APPROVAL (ONLY IF PFC TO APPROVE)	DATE 10/22/99	APPROVED BY SENIOR OFFICER	DATE 10/6/99
		APPROVED BY BOARD OF DIRECTORS / FPC	DATE
		POST-INVESTMENT REVIEW	
		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDECIDED	
		IF YES, QUARTER	YEAR
		PICC COMPLETION	
		BY	DATE

NOTE: USE ADDITIONAL PAGES IF MORE SPACE IS NEEDED

PAGE 1 OF 1

ITEM	DEPT NO.	DIVISION	ACTIVITY TYPE (SEE BACK)	APUDC (SEE BACK)	ESTIMATED EXPENDITURES (\$000)			
2263	696	SOUTHERN	MAIN REPLACEMENT	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	YEAR	THIS REQUEST	PREVIOUS AUTHORIZATION	TOTAL AUTHORIZATION
W.O. # INVESTMENT	148463			PARTIAL AUTHOR.	1999	\$600.00		\$600.00
W.O. # RETIREMENT	348463			<input type="checkbox"/> YES <input type="checkbox"/> NO				
FILE NO.	NBA / MR / PI / SI NO.	EST. START DATE	EST. COMPLETION DATE		RETIRE			
E16302A-K	MR9901	11 01 99	YEAR 4/1/00 QUARTER 1		TOTAL	\$620.00		\$620.00

## PROJECT LOCATION

HAZEL CREST AND EAST HAZEL CREST. THORNTON TOWNSHIP. COOK COUNTY.

ON LAWSON

## PROJECT DESCRIPTION

INSTALL 6,705'-8", 10' - 6", 10'-4" AND 3,665'-2" P.E. GAS MAIN ALONG LINCOLN. BETWEEN 167TH ST., AND 171ST., AND ALONG 171ST STREET BETWEEN LINCOLN AND ASHLAND. INSTALL 1 - 5'X5' DUAL VAULT ALONG LINCOLN AT 170TH ST.

## ALTERNATIVES CONSIDERED

INSTALL 10" 60 PSIG MAIN INSTEAD OF 8" HIGH PRESSURE MAIN  
REVIEWED ALTERNATE ROUTES FOR THE INSTALLATION WHICH INVOLVED ADDITIONAL FOOTAGES.  
CONTINUE TO REPAIR EXISTING 10" GAS MAIN

## REASON FOR REQUEST

ECONOMIC ANALYSIS INDICATES IT IS MORE ECONOMICAL TO REPLACE RATHER THAN REPAIR.  
(MR9901)

FOR REVISIONS ONLY	
REVISION NUMBER	
<input type="checkbox"/> 1	<input type="checkbox"/> 2 <input type="checkbox"/> 3
REIMBURSABLE?	
<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES _____ %
INCLUDED IN BUDGET?	
DOLLARS AND YEAR(S)	
\$600.00 (1999)	

MAINS TO BE INSTALLED						MAINS TO BE RETIRED							
FOOTAGE	SIZE	TYPE	CLASS	COST / FOOT		FOOTAGE	SIZE	YEAR INSTALLED	TYPE	FOOTAGE	SIZE	YEAR INSTALLED	TYPE
				EST.	STD.								
3,665	2"	P.E.	II	\$43.31	\$16.89	15	2"	1900	STL	635	2"	1959	STL
10	4"	STL.	II	\$187.43	\$30.31	1,925	10"	1926	STL	30	6	1960	STL
10	6"	STL.	II	\$197.43	\$31.57	4,095	10"	1929	STL	115	8	1960	STL
6,705	8"	STL.	II	\$56.44	\$60.50	165	4"	1956	STL	565	16	1960	STL
						125	4"	1958	STL	440	2	1984	STL
						120	8"	1958	STL	75	2	1996	P.E.
FEET OF TOTAL MAIN TO BE INSTALLED						FEET OF TOTAL MAIN TO BE RETIRED							
10,390						8,305							

OTHER FACILITIES (INSTALLED OR RETIRED).  
ALSO INCLUDE ANY OPERATING EXPENSE IMPACT

RETIRE 1-5X5 VAULT UNIT #1017, 1-5X5 VAULT UNIT #1119, INSTALL 1 5X5 #410119, 5-8" & 1-6" STL. VALVE. 88 SERVICES  
AT \$400.00 = \$35,200.00

ECONOMIC ASSESSMENT DATA		MAINS TO BE RETIRED	
ITEM	VALUE	RECOMMENDED BY	DATE
COST OF CAPITAL (AFTER TAX)		APPROVED BY PICC	DATE
NET PRESENT VALUE AT C/C (AFTER TAX)		BUDGET COMPLETION / TOLERANCE CHECK BY	DATE
INTERNAL RATE OF RETURN (IRR)		POST-INVESTMENT REVIEW	DATE
TREASURER'S OFFICE APPROVAL (ONLY IF FPC TO APPROVE)	DATE	IF YES, QUARTER	NO <input type="checkbox"/> UNDECIDED <input type="checkbox"/>
		IF YES, QUARTER	YEAR
		PICC COMPLETION BY	DATE
		ACTUAL EXPENDITURES AND COMMITMENTS THROUGH DATE OF COMPLETION	

**ESTIMATED EXPENDITURES (\$000):** Dollar amount (in thousands) of work expected to be accomplished by calendar year; not dollar amount expected to be paid. Use "Previous Authorization" and "Total Authorization" columns only if a revision is invoked.

**ESTIMATED START DATE:** Date first work is expected to start.

**ESTIMATED COMPLETION DATE:** Estimate of quarter and Year when project is expected to be placed in service.

**AFUDC/ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION:** This amount applies to projects requiring six or more months' continuous construction. If yes, contact Supervisor Plant Accounting.

**PROJECT DESCRIPTION:** Project sponsor's description of course of action being proposed for authorization.

**ALTERNATIVES CONSIDERED:** Project sponsor's description of alternatives considered. For example, may reflect a "do nothing," "postpone specified time period," "use NI-Gas versus outside labor," "lease versus purchase," or "repair versus replace" condition.

**REASON FOR REQUEST/REASON FOR BUDGET REVISION:** Provide detailed description of reason for requesting budget authorization or revision. If a PI, indicate in this section the percent expected to be reimbursed.

**MAINS TO BE INSTALLED COST/FOOT:** Show estimated (EST) cost per foot by size, type (e.g. steel, plastic) and construction class (Class 1, generally for new work; Class 2, generally for replacement work). Estimated cost per foot should exclude cost of "unusual conditions" such as a railroad or river crossing. Also, for up to eight-inch pipe, show Engineering Department's past three-year companywide inflation adjusted average cost as standard (STD) cost per foot for pipe indicated. Engineering Department's costs per foot reflect paving and landscaping for replacement work (Class 2)

**ECONOMIC ASSESSMENT DATA:** To be provided by project sponsor with assistance from Treasurer's Office, if needed. For MR's, show only net present value after tax from "Main Replacement Evaluation" Form No. 86-4016). Need not be provided for PI's unless, by policy, the project is to be approved by the Financial Policy Committee.

**Cost of Capital (after tax):** NI-Gas' estimated cost of capital after tax (CC alx). For NBA's only, CC alx should be overall return after tax allowed in last rate case. For all other economic assessments, CC alx should be rate specified currently by Treasurer's Office.

**Net Present Value at CC (after tax):** Total of annual cash flows after tax (but before interest expense) discounted at estimated Cost of capital after tax shown on CC alx line.

**Internal Rate of Return (IRR):** a percent which discounts a 11 cash flows after tax (but before interest expense) to zero. If New Business job, also note if deposit was necessary. If deposit waived, explain why.

**Treasurer's Office Approval:** The economic and tax assumptions and calculations of all projects submitted to PICC which by policy must also be approved by the Financial Policy Committee to be reviewed by Treasurer's Office.

**PARTIAL AUTHORIZATION:** To permit the start of necessary work on projects requiring Board of Director approval but for which the total cost cannot yet be accurately estimated, Policy Order A-11 provides that a partial authorization may be approved by the PICC. The project sponsor is also required to provide a total cost estimate in order to obtain approval of a partial authorization. Among factors to be considered by PICC when granting a partial authorization are safety and whether the work is reimbursable. Each partial authorization should be reported to NI-Gas' president by the PICC chairman. This procedure is expected to be used sparingly. Once a total cost estimate can be accurately estimated, a revised project should be submitted and approved.

#### APPROVALS

**Budget Completion and Tolerance Check:** To be performed/signed by project budget sponsor. Tolerance check is to conform with NI-Gas Procedure C-7, Plant Budget Authorization. Include work order completion notices, unless already forwarded to Plant Accounting.

**Post-Investment Review:** To be completed by PICC secretary.

**PICC Completion:** To be completed by PICC secretary.

APPROVAL LEVELS			
DOLLARS IN THOUSANDS UTILITY PLANT	BOARD OF DIRECTORS/ FINANCIAL POLICY COMMITTEE	PLANT INVESTMENT CONTROL COMMITTEE	SENIOR OFFICER
\$1,000 +	FINAL APPROVAL	PRELIMINARY APPROVAL	PRELIMINARY APPROVAL
≥ \$200 but < \$1,000	INFORMATION ONLY	FINAL APPROVAL	PRELIMINARY APPROVAL
≥ \$100 but < \$200		INFORMATION ONLY	FINAL APPROVAL
GENERAL PLANT			
\$500 +	FINAL APPROVAL	PRELIMINARY APPROVAL	PRELIMINARY APPROVAL
≥ \$150 but < \$500	INFORMATION ONLY	FINAL APPROVAL	PRELIMINARY APPROVAL
\$75 but < \$150		INFORMATION ONLY	FINAL APPROVAL
<b>UTILITY PLANT EXAMPLES</b>	<b>GENERAL PLANT EXAMPLES</b>		
Aquifer work	Communications equipment		
Compressor installations (underground storage)	Computer equipment		
Distribution and transmission main	Computer software (cost must be \$75,000 or greater to capitalize)		
	Office buildings		
	Office furniture		
	Tools		

#### ACTIVITY TYPES

Communication	Main replacement	Office furniture	Tools
Computer software	Mainframe computer	Public improvement	Transmission
Dept. computing equipment	Miscellaneous revision	Storage	Transportation
Land buildings	New business	System improvement	

Item 1.

**NICOR GAS COMPANY**  
**FINANCIAL POLICY COMMITTEE APPROVAL**  
**NEW PROJECT**

**Budget Item No. 2263 - Main Replacement**

Replacement of deteriorating 80-year old main in **the south** suburbs

Total Authorization

\$2,240,000 //

1.4

March 7, 2000

## **WP (F-4) 16**

# **Gas Storage Improvement – Emission Controls**



**NICOR GAS COMPANY**  
**BOARD OF DIRECTORS APPROVAL**

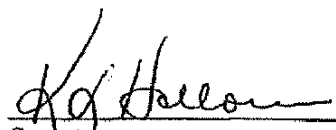
**NEW PROJECT**

**Budget Item No. 194 - Storage**

Installation of eighteen air emission control flare stacks **on** various **equipment** located at our **seven storage** fields to comply with environmental **requirements**.


Total Authorization      **\$2,664,000**

**Approved by Financial Policy Committee**

  
Secretary

July 13, 2001  
Date

**Approved by Board of Directors**



July 19, 2001  
Date

REVISED

WP (F-4) 16 3/6

**200 Nicor Gas**  
**PLANT BUDGET AUTHORIZATION REQUEST** 4009 2-99

Page \_\_\_\_ of \_\_\_\_

**Note: Use additional pages if more space is needed**

BUDGET ITEM NO.	A/I NO.	REGION	CAPITAL TYPE (see back)	AFUDC (see back) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Estimated Expenditures (\$000)			
					Year	This Request	Previous Authorization	Total Authorization
194								
Activity # Investment	104007		106202	PARTIAL AUTHORIZATION <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2000	\$ 0.00	\$ 700.00	\$ 700.00
Activity # Retirement	304007		306202	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2001	\$1,929.00	\$0.00	\$1,929.00
Activity # Investment	104601							
Activity # Retirement	304601							
FILE NO.	NBA/MR/PI/SI NO.	ESTIMATED START DATE Year 2000 Quarter 3	EST. COMPLETION DATE Year 2001 Quarter 4					
				Retired	35			35
				Total	1964	700		2664

**Project Location**  
Pontiac Sta-80, Tmy Grove Sta-50, Ancona Sta-70, Lake Bloomington Sta-40, Lexington Sta-42, Hudson Sta-41, Pecatonica Sta-91

**project Description**  
Install emissions controls on reboilers. A total of 18 new controls will be installed.

**Alternatives considered**

**For Revisions Only**  
Revision (circle)

☒ 2 ☐ 3 ☐ 4

**Reason for Request**  
Compliance with emissions requirements of USEPA

**Reimbursable?**  
☒ No  
☐ Yes \_\_\_\_\_ %

**Reason for Budget Revision**  
See attached sheet

**Included in overall budget?** No  
**Dollars and Year(s)**

Mains to be Installed				Cost/Foot		Mains to be Retired							
Footage	Size	Type	Class	Est.	Std.	Footage	Size	Yr. Installed	Type	Footage	Size	Yr. Installed	Type

Feet of total main to be installed \_\_\_\_\_ Feet of total main to be retired \_\_\_\_\_

Other Facilities (installed or retired). Also include any operating expense impact.

Economic Assessment Data		Approvals	
Item (see other side)	Value	Print Recommended by	Print Approved by Vice President
Cost of Capital (after tax)	%	Nancy J. Huston	DAVID CROCKE
Net Present Value at C/C (after tax)	\$	Recommended by signature	Approved by VP signature
Internal rate of return (IRR), if applicable	%	Nancy J. Huston	DAVID CROCKE
Treasurer's Office Approval (only if FPC to approve)		Approved by CPR	Approved by Board of Directors/FPC
Date		Date	Date
Budget Completion/Tolerance Check by		Post-Investment Review	
		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Undecided	
		If yes, Quarter _____ Year _____	
If you need more space for the 'Mains to be installed/retired' field, please fill it out on another piece of paper and turn that in with this form.		Actual Expenditures and Commitments through date of completion	
		CPR Completion by _____ Date	

OVER

Note: Use additional pages if more space is needed

BUDGET ITEM NO.	A/U NO.	REGION	CAPITAL TYPE (see back)	AFUDC (see back)	Estimated Expenditures (\$000)			
			Storage	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Year	This Request	Previous Authorization	Total Authorization
Activity # Investment	104007		106202	PARTIAL AUTHORIZATION	2000	\$ 550.00	\$ 0.00	\$ 550.00
Activity # Retirement	304007		306202	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2001	\$ 750.00	\$ 0.00	\$ 750.00
Activity # Investment	104601							
Activity # Retirement	304601							
FILE NO.	NBA/MR/PI/SI NO.	ESTIMATED START DATE	EST. COMPLETION DATE					
		Year 2000	Year 2001					
		Quarter 3	Quarter 4					
				Retired	100	0		100
				Total	1400	0		1400

Project Location

Pontiac Sta. 80, Troy Grove - Sta. 50, Lake Bloomington - Sta. 40, Hudson - Sta. 41, Lexington - Sta. 42, Ancona - Sta. 70

Project Description

Install emissions controls on reboilers. A total of 14 new controls will be installed.

Alternatives Considered

Evaluated "Do Nothing" through "Replace all ecology stacks". See attach summary of alternatives and consequences.

For Revisions Only  
Revision (circle)

1 2 3 4

Reason for Request

Compliance with emission requirements of USEPA.

Reimbursable?

☒ No  
☐ Yes %

Reason for Budget Revision

Included in overall budget? Yes

Dollars and Year(s)  
\$180 - 2000

Mains to be Installed				Cost/Foot		Mains to be Retired							
Footage	Size	Type	Class	Est.	Std.	Footage	Size	Yr. Installed	Type	Footage	Size	Yr. Installed	Type
Feet of total main to be installed						Feet of total main to be retired							

Other Facilities (installed and retired). Also include any operating expense impact.

Economic Assessment Data		Approvals	
Item (see other side)	Value	Print Recommended by	Date
Cost of Capital (after tax)	%	Nancy Huston	07/21/00
Net Present Value at C/C (after tax)	\$	Recommended by signature	Approved by VP signature
Internal rate of return (IRR), if applicable	%	Nancy Huston	8-16-00
Treasurer's Office Approval (only if FPC to approve)		Approved by CPR	Date
By _____ Date _____		Budget Completion/ Tolerance Check by	Date
		Post-Investment Review	
		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Undecided	
		If yes, Quarter _____ Year _____	
If you need more space for the Mains to be installed/retired field, please fill it out on another piece of paper and turn that in with this form.		Actual Expenditures and commitments through date of completion	CPR Completion by Date

Recent Activities

- IEPA requested **Nicor** Gas to test the emissions from the **reboiler** at Pontiac in August 1998
- bid out testing and put together a test plan, by the time IEPA approved the plan, the withdrawal season was over and the test postponed until the next winter (1999-2000)
- January 2000 - conducted test of emissions, but aborted the test because of technical difficulties
- based on preliminary results, **likely** to have failed test (85% destruction efficiency required)
- March 2000 - conducted study at Troy Grove and Pontiac on **reboiler** emissions without IEPA present to better understand what was happening
- June 2000 - received report from consultant with results
- efficiency of ecology stack ranges from 50 - 95+ %
- not an official test, so no obligation to report

Regulatory Status

- 1995 - applied for Title V air permits for the storage fields
- used **GRI GLY-CALC** program **to** estimate emissions
- assumed an efficiency of the ecology stacks based on industry standards
- regulations require 85% destruction of organic material if **VOM** > 8 lb/hr or if odor nuisance
- June 1999 - **ONG MACT rule** requires 95% destruction, 3 year compliance period, LDC's exempt

Recommendation

- Replace all ecology stacks with new control devices that achieve 95 % destruction efficiency
- Replace over a 2 year period, 2000 - 2001
- Install new control devices at Pontiac and Troy Grove in 2000 (6 total)
- Install new control devices at Lake Bloomington, Hudson, Lexington and Ancona in 2001 (8 total)
- total budget - \$1,300,000
  - \$550,000 in 2000 (\$180,000 budgeted by Troy Grove)
  - \$750,000 in 2001